Access DB# 189272

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: SATYA SASTRI Examiner #: 79815 Date: 5-8-06
Art Unit: 1713 Phone Number 30 2-1112 Serial Number: 10/805,319
Mail Box and Bldg/Room Location: 10A30 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

_____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

PLEASE SEE ATTACHED.

****

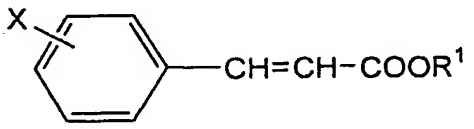
STAFF USE ONLY	Type of Search		Vendors and cost where applicable	
Searcher: EL	NA Sequence (#)		STN	$215.70
Searcher Phone #:	AA Sequence (#)		Dialog	
Searcher Location:	Structure (#)	✓ (3)	Questel/Orbit	
Date Searcher Picked Up:	Bibliographic		Dr.Link	
Date Completed: 5-17-06	Litigation		Lexis/Nexis	
Searcher Prep & Review Time: 5	Fulltext		Sequence Systems	
Clerical Prep Time:	Patent Family		WWW/Internet	
Online Time: 65	Other		Other (specify)	

PTO-1590 (8-01)

WHAT IS CLAIMED IS:

1. A resin composition comprising a 2-(1-arylalkylidene) acetic ester and at least one resin selected from a methyl methacrylate resin, a styrene resin and a methyl methacrylate-styrene copolymer resin, wherein the acetic ester is contained in the composition in an amount of from about 0.0005 part by weight to about 0.1 part by weight with respect to 100 parts by weight of the resin.

2. A resin composition according to claim 1, wherein the 2-(1-arylalkylidene) acetic ester is a compound represented by formula (1).



(1)

wherein X represents a hydrogen atom, an alkyl group or an alkoxyl group, and R^1 represents an alkyl group.

3. A molded article obtainable by molding a resin composition according to claim 1 or 2.

4. A molded article according to claim 3, wherein the article is a light guide.

RESIN COMPOSITION AND MOLDED ARTICLE THEREOF

Abstract of the Disclosure

A resin composition comprising a 2-(1-arylalkylidene) acetic ester and at least one resin selected from a methyl methacrylate resin, a styrene resin and a methyl methacrylate-styrene copolymer resin is provided, wherein the acetic ester is contained in the composition in an amount of from about 0.0005 part by weight to about 0.1 part by weight with respect to 100 parts by weight of the resin. The resin composition is improved in durability without deteriorating the excellent properties of the resin, such as being colorless and transparent.

Anekwe, Imelda (ASRC)

189272

From: SATYA SASTRI [satya.sastri@uspto.gov]
Sent: Monday, May 08, 2006 2:55 PM
To: STIC-EIC1700
Subject: Database Search Request, Serial Number: 10/805,319

Requester:
SATYA SASTRI (P/1713)
Art Unit:
GROUP ART UNIT 1713
Employee Number:
79815
Office Location:
REM 10A30
Phone Number:
(571)272-1112
Mailbox Number:

Case serial number:
10/805,319
Class / Subclass(es):

Earliest Priority Filing Date:
3/26/03
Format preferred for results:
Paper
Search Topic Information:
A resin composition comprising (A) a methyl methacrylate or styrene polymer or copolymer and (B) a compound 2-(1-arylalkylidene)aceticester (claim 1). The structure of (B) is given in claim 2.
Special Instructions and Other Comments:

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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=> d his


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L4             STR

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L6             STR L4
L7           1 S L1 AND L6 AND L2
L8          12 S L1 AND L6 AND L2 FUL
               SAV L8 SAS319/A

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L9           0 S L8

     FILE 'ZCAPLUS' ENTERED AT 11:02:45 ON 17 MAY 2006
L10          8 S L8

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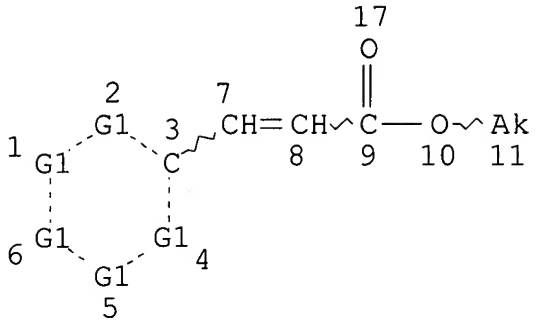

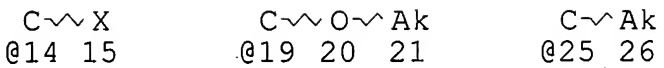

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GGCAT IS SAT AT 11
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GGCAT IS SAT AT 26
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 19

STEREO ATTRIBUTES: NONE
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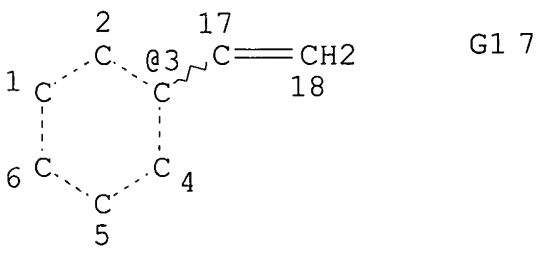
L6 STR



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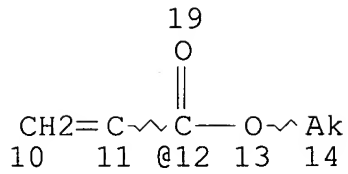

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GGCAT IS SAT AT 14
DEFAULT ECLEVEL IS LIMITED

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NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 5919 ITERATIONS 12 ANSWERS
SEARCH TIME: 00.00.01

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FILE 'ZCAPLUS' ENTERED AT 11:03:56 ON 17 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

=> d l10 1-8 ibib abs hitstr hitrn

L10 ANSWER 1 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:809038 ZCAPLUS
DOCUMENT NUMBER: 135:350560
TITLE: T-butyl cinnamate polymers and their use in photoresist compositions
INVENTOR(S): Malik, Sanjay; Ferreira, Lawrence; Eisele, Jeffrey; Allyn, Whewell
PATENT ASSIGNEE(S): Arch Specialty Chemicals, Inc., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6312870	B1	20011106	US 2000-619180	20000719
WO 2002006895	A1	20020124	WO 2001-US41011	20010615

W: JP, KR, SG
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,

NL, PT, SE, TR
EP 1303789 A1 20030423 EP 2001-951075
200106
15
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
PT, IE, FI, CY, TR
JP 2004504632 T2 20040212 JP 2002-512742
200106
15
TW 548517 B 20030821 TW 2001-90115571
200106
27
PRIORITY APPLN. INFO.: US 2000-619180 A
200007
19
WO 2001-US41011 W
200106
15

AB A resist compn. contg. a polymer of t-Bu cinnamate, a photoacid generator, and a solvent. Optionally, the resist compn. may include a basic compd. The polymer of t-Bu cinnamate has the monomeric units: (R1MeEtC-p-C6H4OH)a, (PhMeCHMeCHC(:O)OC(CH3)3)b and (R2MeEtCC(:O)OR3)c (a=0.3-0.9, b=0.1-0.7, c=0-0.3; R1=H, Me, CH2OR4; R4=H, C1-4 alkyl group; R2=H, Me, CH2OR4, CH2CN, CH2X; X=Cl, I, Br, F, CH2COOR5; R5=C1-4 alkyl group; and R3= isobornyl, cyclohexyl Me, cyclohexyl Et, benzyl, phenethyl). The present invention provides photoresist compn. which produce high resoln. resist patterns with improved etch resistance.

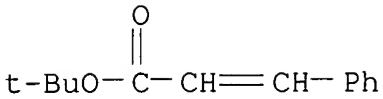
IT **371755-29-2DP**, p-Acetoxystyrene-tert-butyl cinnamate copolymer, hydrolized **371755-30-5DP**, p-Acetoxystyrene-tert-butyl cinnamate-phenethyl acrylate copolymer, hydrolized **371755-31-6DP**, p-Acetoxystyrene-tert-butyl cinnamate-p-tert-butylstyrene copolymer, hydrolized **371755-32-7DP**, p-Acetoxystyrene-tert-butyl cinnamate-styrene copolymer, hydrolized **371755-33-8DP**, p-Acetoxystyrene-tert-butyl cinnamate-isobornyl acrylate copolymer, hydrolized
(photoresist compn. contg.)

RN 371755-29-2 ZCAPLUS

CN 2-Propenoic acid, 3-phenyl-, 1,1-dimethylethyl ester, polymer with 4-ethenylphenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 14990-09-1
CMF C13 H16 O2



CM 2

CRN 2628-16-2
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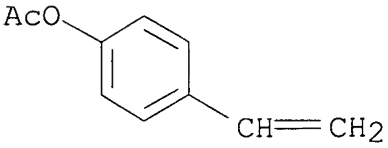

RN 371755-30-5 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, 1,1-dimethylethyl ester, polymer with 4-ethenylphenyl acetate and 2-phenylethyl 2-propenoate (9CI) (CA INDEX NAME)

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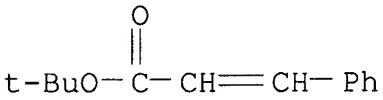
CRN 14990-09-1
CMF C13 H16 O2



CM 2

CRN 3530-36-7
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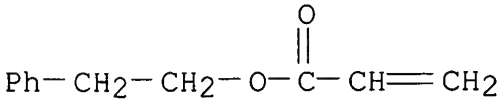

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CRN 2628-16-2
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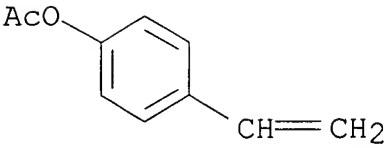

RN 371755-31-6 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, 1,1-dimethylethyl ester, polymer with 1-(1,1-dimethylethyl)-4-ethenylbenzene and 4-ethenylphenyl acetate (9CI) (CA INDEX NAME)

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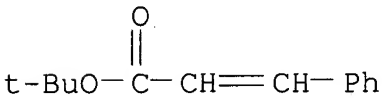
CRN 14990-09-1
CMF C13 H16 O2



CM 2

CRN 2628-16-2
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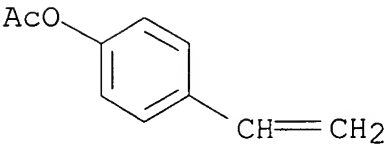

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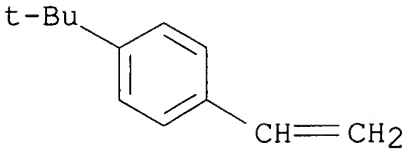
CRN 1746-23-2

CMF C12 H16



RN 371755-32-7 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, 1,1-dimethylethyl ester, polymer with ethenylbenzene and 4-ethenylphenyl acetate (9CI) (CA INDEX NAME)

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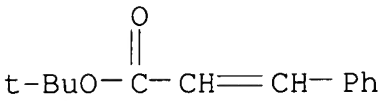
CRN 14990-09-1
CMF C13 H16 O2



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CRN 2628-16-2
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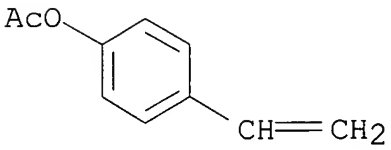

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CRN 100-42-5
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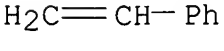

RN 371755-33-8 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, 1,1-dimethylethyl ester, polymer with 4-ethenylphenyl acetate and rel-(1R,2R,4R)-1,7,7-trimethylbicyclo[2.2.1]hept-2-yl 2-propenoate (9CI) (CA INDEX NAME)

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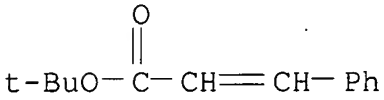
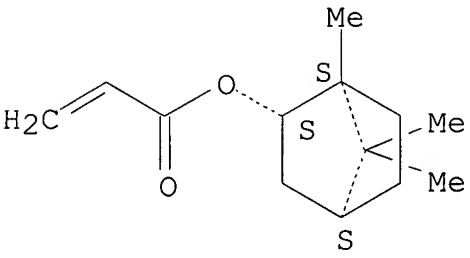
CRN 14990-09-1
CMF C13 H16 O2



CM 2

CRN 5888-33-5
CMF C13 H20 O2

Relative stereochemistry.



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CRN 2628-16-2
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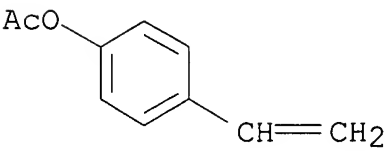

IT **371755-29-2DP**, p-Acetoxystyrene-tert-butyl cinnamate copolymer, hydrolized **371755-30-5DP**, p-Acetoxystyrene-tert-butyl cinnamate-phenethyl acrylate copolymer, hydrolized **371755-31-6DP**, p-Acetoxystyrene-tert-butyl cinnamate-p-tert-butylstyrene copolymer, hydrolized **371755-32-7DP**, p-Acetoxystyrene-tert-butyl cinnamate-styrene copolymer, hydrolized **371755-33-8DP**, p-Acetoxystyrene-tert-butyl cinnamate-isobornyl acrylate copolymer, hydrolized
(photoresist compn. contg.)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:455031 ZCAPLUS
DOCUMENT NUMBER: 103:55031
TITLE: Optical properties of light-focussing plastic rods prepared by photopolymerization and effect of plasticizer
AUTHOR(S): Enmanji, Koe; Takahashi, Kenzo
CORPORATE SOURCE: Mater. Eng. Lab., Mitsubishi Electr. Corp., Amagasaki, 661, Japan
SOURCE: Nippon Kagaku Kaishi (1985), (5), 996-9
CODEN: NKAKB8; ISSN: 0369-4577
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Photopolymn. of Me methacrylate and Me cinnamate was carried out using benzoin Et ether (I) [574-09-4] to yield light-focussing plastic rods with parabolic gradient of refractive index in the region near center axis. The gradient const. (A), which was measured by a light tracing method, increased with increase of I concn. To improve the mech. strength, plasticizer was added, but most of the general plasticizers caused redn. of A value. However, .alpha.-tocopherol acetate [51910-58-8], a plasticizer which has a photoinitiating property, did not. The mech. strength of the plastic rods obsd. by the tensile properties showed max. of 2.0 kg/mm2 at 7% addn. of a such a plasticizer.

IT **68529-20-4P**
(photochem. prepn. of, to prep. light-focusing plastic rods)

RN 68529-20-4 ZCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 3-phenyl-2-propenoate (9CI) (CA INDEX NAME)

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CRN 103-26-4
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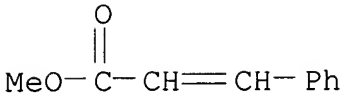

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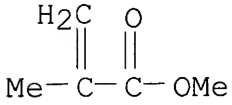


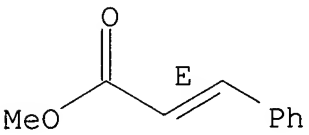
IT **68529-20-4P**
(photochem. prepn. of, to prep. light-focusing plastic rods)

L10 ANSWER 3 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1983:216058 ZCAPLUS
DOCUMENT NUMBER: 98:216058
TITLE: Radical polymerization behavior of trans-methyl cinnamate
AUTHOR(S): Salamone, J. C.; Akharoh, E.; Mahmud, M. U.; Nagabhushanam, T.; Watterson, A. C.
CORPORATE SOURCE: Dep. Chem., Univ. Lowell, Lowell, MA, 01854, USA
SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1981), 22(2), 369-70
CODEN: ACPPAY; ISSN: 0032-3934
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Based on a study of the polymer [86002-35-9] and copolymer [**86002-36-0**] prepd. by radical polymn. and charge-transfer polymn. of trans-Me cinnamate (I) and I with styrene, resp., stereoregular polymers can be produced from the copolymn. of mono- and 1,2-disubstituted olefins.
IT **86002-36-0P**
(prepn. of, by charge-transfer and radical polymn., stereoregularity in relation to)
RN 86002-36-0 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, methyl ester, (E)-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1754-62-7
CMF C10 H10 O2

Double bond geometry as shown.



CM 2

CRN 100-42-5
CMF C8 H8

$H_2C{=}CH{-}Ph$

IT **86002-36-0P**
(prepn. of, by charge-transfer and radical polymn., stereoregularity in relation to)

L10 ANSWER 4 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1979:7068 ZCAPLUS
DOCUMENT NUMBER: 90:7068
TITLE: Cinnamate ester copolymers for fiber optics
INVENTOR(S): Enmanji, Koe; Takahashi, Kenzo; Kusakawa, Hideaki
PATENT ASSIGNEE(S): Mitsubishi Electric Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 53101088	A2	19780904	JP 1977-16410	19770216

PRIORITY APPLN. INFO.: JP 1977-16410 A

197702
16

AB Cinnamate esters and 1-4 times their wt. of other monomers having refractive index and reactivity different from those of the cinnamate esters are polymd. in the presence of photopolymn. initiators to give copolymers for fiber optics. Thus, a mixt. of Me cinnamate 10, Me methacrylate 40, and benzoin Me ether 4 parts was sealed in a 3.0-mm-diam. (inside) glass tube, irradiated 10 h with a 500-W Xe lamp, and heated 10 h in an oven at 80.degree. to give a copolymer [**68529-20-4**] rod having refractive index gradually increasing from 1.492 at the periphery to 1.53 at the center.

IT **68529-17-9P 68529-20-4P**
(manuf. of, by photopolymn., for fiber optics)

RN 68529-17-9 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with methyl 3-phenyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 103-26-4
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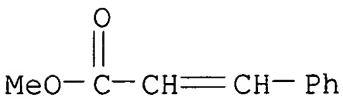
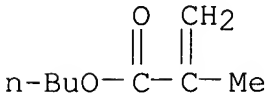


CM 2

CRN 97-88-1
CMF C8 H14 O2

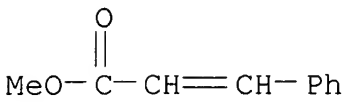


RN 68529-20-4 ZCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl 3-phenyl-2-propenoate (9CI) (CA INDEX NAME)

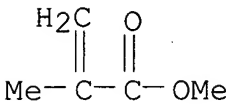
CM 1

CRN 103-26-4
CMF C10 H10 O2



CM 2

CRN 80-62-6
CMF C5 H8 O2



IT **68529-17-9P 68529-20-4P**
(manuf. of, by photopolymn., for fiber optics)

L10 ANSWER 5 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1974:83703 ZCAPLUS
DOCUMENT NUMBER: 80:83703
TITLE: Temperature dependence of monomer reactivity ratios in copolymerization of styrene with methyl and ethyl cinnamates
AUTHOR(S): Barson, C. A.; Turner, M. J.
CORPORATE SOURCE: Dep. Chem., Univ. Birm., Birmingham, UK
SOURCE: European Polymer Journal (1973), 9(8), 789-93
CODEN: EUPJAG; ISSN: 0014-3057
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Carboxyl 14C-labeled Et cinnamate [103-36-6] and Me cinnamate [103-26-4] were copolymd. with styrene at 40-130.deg. using azoisobutyronitrile initiator and the compns. of the products, Et cinnamate-styrene copolymer [**30229-76-6**] and Me cinnamate-styrene copolymer [**30104-80-4**], were detd. by liq. scinillation counting. Monomer reactivity ratios were detd. graphically from a simplified form of the copolymer compn. equation. Arrhenius parameters were calcd.; the energies of activation and frequency fractors favored cross-propagation and self-propagation, resp. The latter effect predominated slightly but no steric effects were obsd.

L10 ANSWER 6 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1972:515862 ZCAPLUS
DOCUMENT NUMBER: 77:115862
TITLE: Polyester fibers based on ethylene terephthalate
INVENTOR(S): Tsuji, Takaaki
PATENT ASSIGNEE(S): Kuraray Co., Ltd.
SOURCE: Jpn. Tokkyo Koho, 4 pp.
CODEN: JAXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

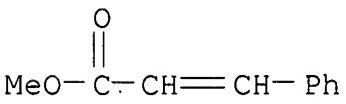
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 46043263	B4	19711221	JP 1968-91860	19681213

AB Fibers from a blend of poly(ethylene terephthalate) (I) or poly(ethylene terephthalate isophthalate) [24938-04-3] and poly(Me methacrylate) (II) [9011-14-7], styrene-dimethyl fumarate copolymer [29058-33-1], .alpha.-methylstyrene-ethyl acrylate copolymer [27615-09-4], styrene-methyl cinnamate copolymer [**30104-80-4**], or p-chlorostyrene-methyl methacrylate copolymer [26746-77-0] were hydrolyzed in the presence of an alkali to give a product having better dyeability (cationic and disperse dyes), pilling resistance, and antistatic properties than unmodified polyester fibers and polystyrene-modified polyester fibers. For example, a fiber prepd. from a 70:30 I-II blend was impregnated with dioxane and hydrolyzed with a 40 g/l. aq. KOH at 100.deg. for 30 min.

IT **30104-80-4**
(antistatic polyester fiber compn. contg.)
RN 30104-80-4 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, methyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 103-26-4
CMF C10 H10 O2



CM 2

CRN 100-42-5
CMF C8 H8

$H_2C{=}CH{-}Ph$

IT **30104-80-4**
(antistatic polyester fiber compn. contg.)

L10 ANSWER 7 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1968:114995 ZCAPLUS
DOCUMENT NUMBER: 68:114995
TITLE: Radical copolymerization of alkyl cinnamates and alkyl atropates
AUTHOR(S): Otsu, Takayuki; Yamada, Bunichiro; Nozaki, Toru
CORPORATE SOURCE: Osaka City Univ., Osaka, Japan
SOURCE: Kogyo Kagaku Zasshi (1967), 70(11), 1941-4
CODEN: KGKZA7; ISSN: 0368-5462
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Me, Et, .beta.-chloroethyl, tert-Bu, Bu, Ph, and benzyl cinnamates (PhCH:CHCO2R) were synthesized from the corresponding alcs. and cinnamic acid or cinnamoyl chloride and their properties are given in Table I. Et atropate was prepd. by the reaction of formalin with the condensate of Et phenylacetate and Et oxalate, and .beta.-chloroethyl, Pr, and Bu atropates were obtained by the esterification of the corresponding alcs. with atropic acid prepd. by alk. hydrolysis of Et atropate. [TABLE OMITTED] The properties of the atropates (CH2:CPhCO2R) are given in Table II. The binary copolymn. of styrene and these esters was carried out at 60.degree. with azobisisobutyronitrile as the initiator. [TABLE OMITTED] The molar mixing ratios of the monomers were 0.1-0.9:1. The compn. of the copolymers was detd. from their C contents and the monomer reactivity ratios, r1 and r2 (M1 = styrene) were calcd. The Alfrey-Price Q and e values for the esters were calcd. from r1 and r2 by taking the values for styrene as Q1 = 1.0 and e1 = -0.8. These values are shown in Tables I and II. The plot of .sigma.* vs. log(1/r1) gave a straight line in the cases of the copolymns. of styrene and the cinnamate esters. The radical reactivities of the cinnamate esters depend on the polarizability of the esters and are not influenced by the steric effects of the alkyl (or aryl) groups. Styrene and the atropate esters formed nearly 1:1 molar copolymers from a wide range of monomer ratios. This indicates the strong tendency for the alternating growing of the copolymer chains in the

combinations of styrene and the atropate esters. The larger Q2 values for the atropate esters than for the cinnamate esters are due to the steric effects of the .beta.-substituted groups.

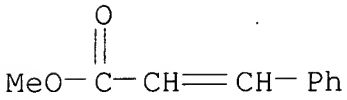
IT **30104-80-4P 30229-74-4P 30229-75-5P 30229-76-6P**
(prepn. of, reactivity ratios in)

RN 30104-80-4 ZCAPLUS

CN 2-Propenoic acid, 3-phenyl-, methyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

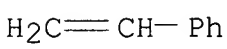
CM 1

CRN 103-26-4
CMF C10 H10 O2



CM 2

CRN 100-42-5
CMF C8 H8

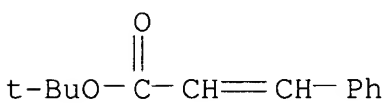


RN 30229-74-4 ZCAPLUS

CN Cinnamic acid, tert-butyl ester, polymer with styrene (8CI) (CA INDEX NAME)

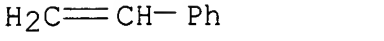
CM 1

CRN 14990-09-1
CMF C13 H16 O2



CM 2

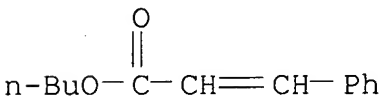
CRN 100-42-5
CMF C8 H8



RN 30229-75-5 ZCAPLUS
CN Cinnamic acid, butyl ester, polymer with styrene (8CI) (CA INDEX NAME)

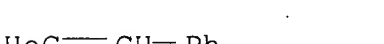
CM 1

CRN 538-65-8
CMF C13 H16 O2



CM 2

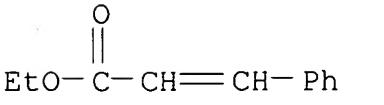
CRN 100-42-5
CMF C8 H8



RN 30229-76-6 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, ethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

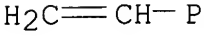
CM 1

CRN 103-36-6
CMF C11 H12 O2



CM 2

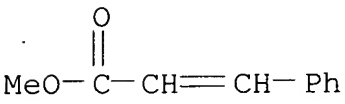
CRN 100-42-5
CMF C8 H8



IT **30104-80-4P**, preparation **30229-74-4P**, preparation **30229-75-5P**, preparation **30229-76-6P**, preparation
(reactivity ratios in)
RN 30104-80-4 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, methyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

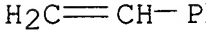
CM 1

CRN 103-26-4
CMF C10 H10 O2



CM 2

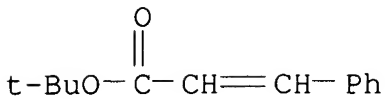
CRN 100-42-5
CMF C8 H8



RN 30229-74-4 ZCAPLUS
CN Cinnamic acid, tert-butyl ester, polymer with styrene (8CI) (CA INDEX NAME)

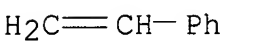
CM 1

CRN 14990-09-1
CMF C13 H16 O2



CM 2

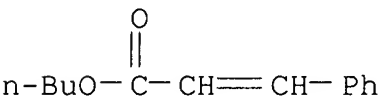
CRN 100-42-5
CMF C8 H8



RN 30229-75-5 ZCAPLUS
CN Cinnamic acid, butyl ester, polymer with styrene (8CI) (CA INDEX NAME)

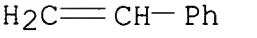
CM 1

CRN 538-65-8
CMF C13 H16 O2



CM 2

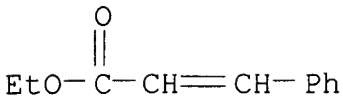
CRN 100-42-5
CMF C8 H8



RN 30229-76-6 ZCAPLUS
CN 2-Propenoic acid, 3-phenyl-, ethyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

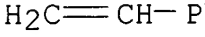
CM 1

CRN 103-36-6
CMF C11 H12 O2



CM 2

CRN 100-42-5
CMF C8 H8



IT **30104-80-4P 30229-74-4P 30229-75-5P**
30229-76-6P
(prepn. of, reactivity ratios in)
IT **30104-80-4P**, preparation **30229-74-4P**, preparation
30229-75-5P, preparation **30229-76-6P**, preparation
(reactivity ratios in)

L10 ANSWER 8 OF 8 ZCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1968:69572 ZCAPLUS
DOCUMENT NUMBER: 68:69572
TITLE: Copolymers of substituted conjugated vinyl compounds and olefin compounds
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd.
SOURCE: Fr., 10 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1489950	A1	19670728	FR 1966-71473	19660729
DE 1795866	B1	19790809	DE 1967-1795866	19660722
DE 1795866	C2	19800410		
DE 1645378	B2	19791206	DE 1966-S105114	

PRIORITY APPLN. INFO.: JP 1965-46495 A 19660729
JP 1965-44060 A 19650722
JP 1966-35764 A 19660602

AB The title compns. are prepd. by treating an olefinic compd. with a conjugated vinyl compd. in the presence of an organometallic catalyst and O or org. peroxide at -150.degree. to +100.degree.. Thus, to 3.2 g. Me methacrylate (I) in 60 ml. PhMe, 8 millimoles Et3Al2Cl3 (II) (in the form of a soln. of 0.2 g./ml. in PhMe) were added at -78.degree. under N. The reaction mixt. was stirred vigorously, the temp. raised to 25.degree., and then 5 g. styrene added. After 5 hrs., the reaction was stopped by the addn. of MeOH, and the insol. copolymer was sepd., washed with MeOH, and dried in vacuo at 50.degree. to give 1.54 g. of a 1:1 copolymer with an intrinsic viscosity 2.02 dl./g. (C6H6, 30.degree.) and a softening point 231-3.degree. which could be pressed to transparent films with a d23 1.119. I was copolymd. with vinyl chloride in the presence of II and Bz2O2 in PhMe to give the copolymer. The following copolymers are prepd. similarly (olefinic compd., conjugated vinyl compd., catalyst, solvent, and intrinsic viscosity dl./g. given): C2H4, I, II, heptane, -; propylene, I, AlEtCl2, heptane, 0.62; propylene, I, SnCl4Et3Al, PhMe, -; allylbenzene, I, BCl3-Et2Zn, cyclohexane, -; styrene, Bu methacrylate, II, PhMe, 2.95; styrene, Me .alpha.-chloroacrylate, II, PhMe, -; styrene, .alpha.-chloroacrylonitrile, II, PhMe, 0.20; styrene, methacrylonitrile, II, PhMe, 0.54; styrene, methacrylamide, II, PhMe, -; propylene, Me crotonate, EtAlCl2, heptane, 0.25; styrene, Me cinnamate, II, PhMe, 0.66.

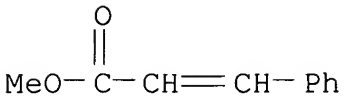
IT **30104-80-4P**, preparation
(catalysts for, trichlorotriethyldialuminum as)

RN 30104-80-4 ZCAPLUS

CN 2-Propenoic acid, 3-phenyl-, methyl ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

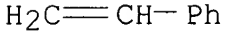
CM 1

CRN 103-26-4
CMF C10 H10 O2



CM 2

CRN 100-42-5
CMF C8 H8



(manuf. of, catalysts for, trichlorotriethyldialuminum as
IT **30104-80-4P**, preparation
(catalysts for, trichlorotriethyldialuminum as)
IT **30104-80-4P**, preparation
(manuf. of, catalysts for, trichlorotriethyldialuminum as)